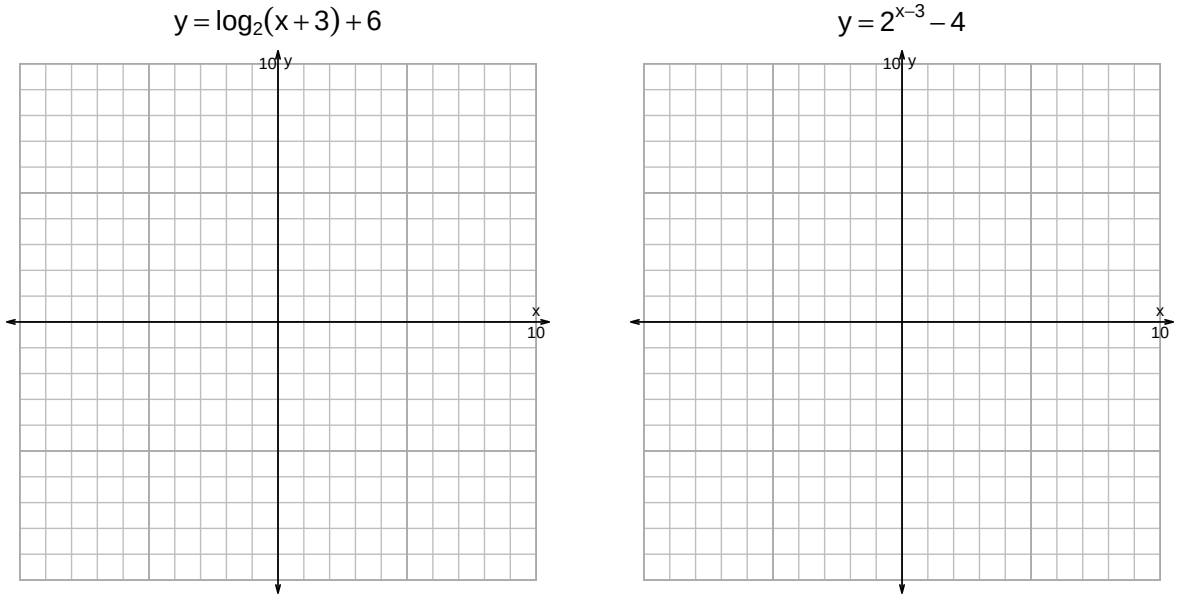
Name: Date:

s18quiz: EXP LOG (Practice v133)

1. Graph $y = \log_2(x+3) + 6$ and $y = 2^{x-3} - 4$ on the grids below. Also, draw any asymptotes with dotted lines.



2. Write (but do not evaluate) the solution to the equation below by writing a logarithmic expression.

$$11 = \left(\frac{7}{4}\right) \cdot 2^{-5t/3}$$

3. An exponential function $f(x) = 12.3 \cdot e^{-1.55x}$ is graphed below on a semi-log plot.

a. Using the plot above, evaluate $f(-2.7)$.

b. Express $f^{-1}(x)$, the inverse of f.

c. Using the plot above, evaluate $f^{-1}(0.3)$.